Amendments to the Claims:

This listing will replace all prior versions, and listings, of claims in the application.

Listing of the Claims.

- 1. (canceled)
- 2. (currently amended) The electrode of claim [[1]] <u>64</u> wherein the framework material is alloyed with an alkali metal.
- 3. (canceled)
- 4.-7. (canceled)
- 8. (currently amended)The electrode of claim [[1]] <u>64</u>, wherein the nanofilm has a thickness of not greater than about 500 nm.
- 9. (original)The electrode of claim 8, wherein the nanofilm has a thickness of not greater than about 200 nm.
- 10. (original)The electrode of claim 9, wherein the nanofilm has a thickness of not greater than about 100 nm.
- 11. (previously presented)The electrode of claim 2, wherein the alkali metal is lithium and the lithium alloy of the nanostructured material has the formula $\text{Li}_x \text{Si}_{(1-z)} \text{Ge}_z$, wherein x is at least about 1.
- 12. (original)The electrode of claim 11, wherein the lithium alloy of the nanostructured material has the formula $\text{Li}_x \text{Si}_{(1-z)} \text{Ge}_z$, wherein x is at least about 2.5.

U.S. Pat. Application No. 10/829,598 Reply to Office Action dated August 13, 2009

- 13. (currently amended)The electrode of claim [[1]] <u>64</u>, wherein the nanostructured material has a cycle life that is stable over at least about 10 cycles.
- 14. (original)The electrode of claim 13, wherein the nanostructured material has a cycle life that is stable over at least about 20 cycles.
- 15. (currently amended) The electrode of claim [[1]] <u>64</u>, wherein the nanostructured material exhibits a rate capability of at least about 1*C*.
- 16. (canceled)
- 17: (canceled)
- 18. (currently amended)The electrode of claim [[1]] <u>64</u>, wherein the substrate is a current collector and is made from a metal.
- 19. (withdrawn)A secondary electrochemical cell comprising an anode, a cathode, and an electrolyte, wherein the anode comprises nanostructured material of formula $Si_{(1-z)}Ge_z$ or a lithium alloy thereof, wherein $0 < z \le 1$.
- 20. (withdrawn)The secondary electrochemical cell of claim 19, wherein the secondary electrochemical cell is an electrochemical supercapacitor.
- 21. (withdrawn)The secondary electrochemical cell of claim 19, wherein the secondary electrochemical cell is fabricated on an integrated device.
- 22-29 (canceled)
- 30.-40 (canceled)

41.-50. (canceled)

- 51. (currently amended) The electrode of claim [[1]] <u>64</u> wherein z is from 0.5 to 0.75.
- 52. (currently amended) The electrode of claim [[41]] <u>64</u>, wherein the nanofilm adheres to a substrate which serves as a current collector.
- 53. (canceled)
- 54. (currently amended) The electrode of claim [[41]] <u>66</u>, where the thickness of the nanofilm is no greater than 500 nm.
- 55. (canceled)
- 56.-63.(canceled)
- 64. (currently amended) The electrode of claim 1, An electrode for a secondary electrochemical cell, the electrode comprising a substrate and a layer of nanostructured framework material which adheres to the substrate, the framework material being in the form of an amorphous nanofilm of silicon-germanium material of formula Si_(1-z)Ge_z, wherein z is from 0.25 to 0.75 and wherein the electrode is the anode of a secondary electrochemical cell comprising an anode, a cathode and an electrolyte containing a lithium salt, the framework material of the electrode being disposed to allow interaction with the electrolyte.
- 65. (canceled).

66. (currently amended) The electrode of claim 42, An electrode for a secondary electrochemical cell, the electrode comprising an alkali metal alloy of nanostructured silicon-germanium material of formula Si_(1-z)Ge_z wherein z is from 0.25 to 0.75, the alkali metal alloy being produced by electrochemically alloying an alkali metal with an amorphous nanofilm of the material of formula Si_(1-z)Ge_z and wherein the electrode is the anode of a secondary electrochemical cell comprising an anode, a cathode and an electrolyte containing a lithium-salt, the alkali metal alloy of the electrode nanofilm being disposed to allow interaction with the electrolyte.

67.-68.(canceled)

69. (currently amended)The electrode of claim [[68]] <u>66</u> wherein the alkali metal is lithium.

70.-72.(canceled).

- 73. (new). The electrode of claim 64, wherein the silicon-germanium material is a solid solution of silicon and germanium.
- 74. (new) The electrode of claim 64, wherein the silicon- germanium material is not homogeneous.
- 75. (new) The electrode of claim 66, wherein the silicon-germanium material is a solid solution of silicon and germanium.
- 76. (new) The electrode of claim 66, wherein the silicon-germanium material is not homogenous.
- 77. (new) The electrode of claim 66, wherein the alkali metal is lithium and the lithium alloy has the formula $\text{Li}_x \text{Si}_{(1-z)} \text{Ge}_z$, wherein x is at least about 1.